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THE GAMES TEACHERS PLAY:  
STUDENTS' OPINIONS OF EDUCATIONAL GAMES  
IN THE SECONDARY CLASSROOM

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A Project  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Education

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by  
Darald Eugene Erickson

September 2000

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by  
Darald Eugene Erickson  
September 2000

Approved by:

  
Rosalie Giacchino-Baker, Ph.D.

8-25-00  
Date

  
Juan Gutierrez

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## **ABSTRACT**

Secondary teachers are looking for successful ways to enhance teaching and learning in their classrooms. Existing research on the effectiveness of educational games is inconclusive. However, anecdotal evidence suggests that games help students learn in natural ways.

After systematically using educational games in three secondary English classes over a one-year period, this project documents the effectiveness of games by analyzing students' opinions. Surveys were used to determine the perceptions of 150 students about the actual games used in their classes. Some examples of effective games are also given.

### **ACKNOWLEDGMENTS**

It is my education at CSUSB that made me a better teacher. The faculty's experience in teaching the principles of education has helped to develop my effectiveness in the classroom. I am grateful for their guidance and support.

I am especially indebted to Dr. Rosalie Giacchino-Baker and Dr. Juan Gutierrez for their time, caring, understanding, and help.

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I dedicate this project to my mother without whose encouragement and love I would never have become a teacher.

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## **CHAPTER ONE**

### **Background**

#### **Introduction**

Chapter One presents an overview of the project. A brief look at the history of games is presented. The importance of games to American culture is identified. The context of the problem is discussed, followed by the purpose and significance of the project. A general definition of educational games is given.

#### **Brief History of Games**

Games have all had a very important impact on the lives of men and women throughout the history of the world. In many cases, the games people played conveyed a symbolic meaning representing more than the superficial diversion experienced by the participants. Futuristic and prophetic soothsayers or seers have used dice to tell the fortunes of many a weary wanderer. The African Zulu and the Native American both used games of chance to entice enthusiastic players into a cultural interaction process that was important to the growth of the group and to the selection of leaders for tribal hierarchy. Games have always been a source of learning and achievement. Ancient Greeks knew the importance of a healthy mix of games and philosophy. Shakespeare made numerous references to sports, athletics, and games. We have arrived now at a most important time in history. Education is more dynamic than it has ever been.

Games should be a part of this changing tide. They may be an excellent way of reaching our diverse youth.

### **Games and American Culture**

Our American culture has developed through the games that children play. We have come from an era where children used their imagination more to manufacture scenarios and scripts in an inventive nature (Goles, 1982). For example, children would play "Cowboys and Indians," "Cop and Robbers," or "House." After World War II, boys from all over the country played war, where they single-handedly saved the world from a hedonistic and sadistic tyrant.

During this same period, children and adults spent hours, in a culture that promoted placid, social, and communicative skills, playing cards by candlelight or around a kerosene lamp. Friendships were enhanced and lasted a lifetime because of the interaction and love shared around the family card table or the kitchenette. The saying went, "the family that prays together, stays together;" and it was also a given that if a family played together it stayed together. Board games like Monopoly, Parcheesi, or Trivial Pursuit provided vehicles where a family could sit together and discuss the "everything-and-anything" under the sun; from the day's most trivial and mundane activities, to the problems of the neighborhood

boy; from the Yankees winning the pennant, to the importance of being honest in everyday business dealings.

Children still play games today, but the type of games they play and the interaction they have with adult models is different. With the decline of games, our culture has lost the opportunity to teach and learn in this way.

### **Context of the Problem**

It is important to regain the chance to teach and learn by playing more games. People of all ages, and particularly younger children and adolescents are more motivated to learn when they are playing games (DeVries and Edwards, 1973). The ordinary student is much more motivated and excited to learn the curriculum when games are used in the classroom. The teacher usually does not have to fight for the attention of the students when games are employed, and the skills gained in playing the game help the students to retain academic information better than any other method (Gordon 1970). Students stand in line--at attention--to play a game, while the same students in a regular class will sit mildly by, constantly looking at the clock on the wall, praying for the period to end.

### **Purpose of the Project**

Today and into the future, games will continue to play an extremely important part of cultural development. We have reached the age of the CD-ROM and interactive video. We have put aside board games and traded them in for



sizzling, visually stimulating computer games with special effects and life-like reality. Children are no longer satisfied with a tender movie, filmed in black and white, where the hero saves the world from a corrupt, destructive force. They exist in a small, selfish world where they must constantly be stimulated through devices that promise instant gratification. The idea of working for something in the future, unlike the average children of the fifties, has become an almost nonexistent, unmotivating attraction. They are the "here" and "now," the "me," "my," and "mine" generation.

This is the MTV era. These are minds that are to learn but cannot wait. These are bodies that cannot still. These are the classes filled with attention disorder students. These are the students of the next century. They are our best hope for the future. They are **our** students.

The concerned teacher must find a way to get to the minds of the majority of these students. The exclusive use of "drill and kill," lecture, discovery, or inquiry have not given us as educators the kind of results we expect out of most of our students. Some say that our education system lags behind Germany, Japan, China, and most of Europe in almost every category of academia. We realize we need to do more. Games seem to be the simple solution to a

more meaningful, productive, and motivational experience for our students. Games are natural and innate to the students (Walljasper, 1982). They are engaging and interesting for our pupils. Games make learning fun for them. Look to the games of Nintendo or Sega Genesis or others in this category. Through games like these, students understand rules, actions, and consequences. Students seem to naturally pick up on the rules and are able to learn at a high level, while still having fun. Students are just as receptive to classroom games where academic, analytic, and adaptive skills are used.

### **Significance of the Project**

This project is significant in three ways. First, it reviews the current literature, which suggests that students like to learn by using games. Second, it provides examples of effective games for secondary English classes. Third, through surveys, it analyzes students' opinions about games that enriched their learning.

The classroom teacher has the responsibility to decide upon the type of game to be used in order to accomplish the main and subordinate course objectives. An effective teacher will decide upon or modify games so that the game is always, and this is the key, always educational, stimulating, motivating, engrossing, perplexing, interesting, skill-enforcing, challenging, or otherwise beneficial. The most effective teacher will provide games

that allow the student to use higher order thinking and learning skills.

Research shows that children learn in the most natural way from games. They are motivated to learn and they are able to progress and achieve academically to a further level by using games than they are by being subjected to the more traditional types of teaching methods prominent in most schools today (Moffett and Wagner, 1993).

If teachers are to gain access to the minds of many students, including the "at-risk" students, then they will have to relinquish the idea of teaching in the most ordinary, outdated, and traditional sense. Instead, they must force themselves to use learning games to teach their curriculum on a daily basis. The future lies in the hands of the teacher who understands the great and untapped potential source of using academic games in the classroom on a regular basis (Sission and Becker, 1988).

This project contributes to the growing body of anecdotal evidence on the effectiveness of games. For the purpose of this project, educational games are defined as structured or planned activities which replace or augment other teaching methods in order to increase student motivation, cooperation, freedom of movement, participation, fun, leadership, social skills, and/or general learning.

## **CHAPTER TWO**

### **Review of the Literature**

#### **Introduction**

Chapter Two contains a review of literature about educational games.

Research findings related to the literature about academic games within the secondary classroom were inconclusive. Several authors found educational games at the secondary level to be very effective (Gordon, 1970; Karlin, 1975). Others researchers concluded that educational games provided little or no efficacy in teaching (Berlyle, 1969; Millar, 1958). Still others felt that teaching using educational games was successful but not measurable. The consensus seems to be that research has not provided conclusive statistical evidence either for or against the effectiveness of educational games.

There is substantial anecdotal evidence that academic games work very well. Glazier (1969) describes what he calls "obvious" evidence best when he says, "There is surprisingly little good research evidence on the educational value of games. Yet, anyone who has seen a good educational game played can give you volumes of anecdotal, impressionistic data proving the effectiveness of game learning, but organized, systematic studies are virtually non-existent" (p. 2).

Most researchers do acknowledge, though, that educational games offer an alternative way to reach and teach the rambunctious and dynamically active students of today (Cratty, 1971). Numerous authors reviewed for this project (e.g., Carlson, 1964; Davey, & Dickerson, 1994; Humphrey, 1972; Ingram, Jones, & Le Butt, 1975; Karlin, 1975; Weickert, and Bell, 1972) talked about the importance of games with younger, pre-secondary students.

Many researchers stated that certain skills and information could be taught just as well through the use of well-organized games, such as media center skills (Bell and Wierckert, 1981). Nearly all authors studied for this project were able to say that academic games were a good way for teachers today to vary the methods and formats of their teaching. They recognized that generally, learning and important skills would come from using those gaming strategies.

### **Need for Academic Gaming**

The importance of using games seems apparent to even the most zealous of skeptics. Human nature, coupled with an intrinsic enjoyment of play and fun, stemming from our childhood, gives itself to games (Goles, 1982). Most children have a passion for learning. As Brewer and Shears (1972) suggest, "Games fit the lifestyle of children and they engage children in learning experiences" (p. ix).

From the time children are born, they are involved in games and simulations with their parents and other close relatives. The use of games many times is a "survival" technique or strategy that parents use to teach children the safety tips and significant facts and skills that they will need to be safe and happy. For example, a parent may use a game to teach a toddler his name, phone number, and address for obvious reasons (Glazier, 1969). So, children, from an exceedingly young age, grow up enjoying games, and also, actually learning from the games they play. Even the board games that small children play and enjoy, teach them things such as strategy or skill. Skill and strategy are abilities that can be increased with each new gaming experience. Karlin (1975), states that, "Games can be used to develop creativity and to produce critical thinking" (p.112-113). This is manifest whenever a child puts a puzzle together or learns how to use phonics and syntax in order to build sentences or read. As children grow to learn, they also learn to enjoy the way they are learning. Games are an important part of their childhood and integral to their growing experience. This theory of learning through games is very prevalent and is accentuated by Thomas (1972), who quotes his mentor in saying, "Greenacre (1959) points out that play may be made up of more than anxiety-reducing defense mechanisms, and may in



fact, be a 'dress rehearsal' for future experiences" (p. 33). Piaget (1932) also proclaims that "play has a specific role in his theory of intellectual development" (p.33).

Education is full of caring, concerned, and dedicated teachers, who want nothing more than to help their students develop intellectually and socially. Teachers grope on a daily basis for any sure-fire method that would allow students to become critical thinkers, problem-solvers, risk-takers, and good citizens with high moral standards and integrity (Glakas, 1981). The problem that these caring teachers face is that the standard methods of teaching are not leading directly towards the goals and outcomes desired. The dropout rate in high schools is perplexingly high. We must find a way to reach this group of students.

Teachers across this nation are not satisfied with the progress of the majority of students in their classes. Many are discouraged, and self-guilt is rampant. Many new teachers enter the ranks of pedagogy and, within a short span of time, believe themselves to be inadequate in the professional positions they hold. Teachers are constantly making changes in their classrooms, in their curriculum, and in their teaching styles, strategies, and methodologies in order to improve implementation (Vacca, 1985). They are looking for a nexus where the student realizes the

importance of the subject matter. The teacher is looking for a way to make learning fun and, at the same time, academically stimulating.

Some of their problems are universal: what can a teacher today do to be more successful, more instructionally sound, and systematically more effective? The solution, which seems on the surface so simple and obvious, is the abundant and liberal use of classroom games (Davey, Sullivan, and Dickerson, 1994). Academic games are able to provide missing ingredients to help encourage the teacher (Ernest, 1986). A teacher can transform an ordinary, dogmatic class into a revolutionary learning center through the inclusion of games in the curriculum. As indicated by Gordon (1970):

The classroom is being converted from an assembly of passive, perhaps bored spectators, into a laboratory, where each member is an active participant in the learning process. Among recent innovations, educational games offer great promise of furthering this change. Not only are they fun, but also they require that the players share in making decisions throughout the game. (p. 2)

Educational games are able to provide students with the missing components to augment learning in any classroom. They present a diverse way for students to learn the facts, details, or concepts that must be mastered



in any subject area (Davey, Dickerson, and Sullivan, 1976). Learning through games is the most natural way to learn. Remember how babies, toddlers, and little children learn? They learn almost everything in those formidable years through songs, repetition, or mimicking games. They learn very enthusiastically--all the while, learning quickly. The beautiful thing about games is that children learn without even realizing that they are learning (Karlin, 1975).

Using games in education is a very "hard sell." There is an assumption that when a teacher and a class are involved in an educational game they are simply wasting time. Principals require that instructors spend most of their time in strict control of the students' actions and language. This ultimately means that they are sadly in charge of their students' intellect and, most distressingly, their imaginations (Glazier, 1969).

Students need to be able to count on school and the teacher to provide them with the excitement that is generated by active learning. Society and schools are past the age when a professor arrogantly stands in front of a class, indignantly demands respect simply because of his title, and lectures to an enthusiastic group of students who "live and die" on his every word. The world has changed dramatically since Socrates. In our education system, there are teachers like that, but overall, the biggest change has been the students; the student

population has been drastically transformed since those early days of formal education.

In truth, the students in today's classes come from a variety of lifestyles, cultures, and backgrounds; they carry the baggage that this wonderful and diverse, yet puzzling entity we call a class encompasses. We have students in the same classes with the greatest variance of skill levels we have ever seen. Reading levels in the same classroom are miles apart. Some students have and use the latest technology, while their peers have never used a typewriter, much less a word processor or a computer.

#### **Why Classroom Games Work**

The introduction and widespread use of high-speed computers and the Internet have shortened students' attention spans. Computer games and the World Wide Web have allowed even the youngest student to enjoy the action, color, and excitement provided by a machine. Today, our students expect and demand that their teachers furnish them with this same excitement. Using educational games is one of the few ways that it is possible to reach all of these diverse students at the same time, and all with an equal opportunity to learn (Goles, p. 12). By using a variety of games and by strategic and effective planning, a teacher can enhance learning in the classroom. Some teachers claim that the addition of educational games to their teaching

strategies has given them some of their most effective teaching experiences (Hawkes, p.45).

Teachers' experiences, through the careful use of academic learning games, have long been a part of academia. Dewey long ago "warned against synthetic problems and insisted that, for learning, problems must arise from some activity of intrinsic interest to the child, or, better still, actually be originated by him" [sic] (Rogers and Miller, 1984). Educators must change the perception that games are only fun and do not teach. They have to realize that through the use of educational games they can teach almost any concept they wish, and that the students will be willing participants. Koppel and Lind (1985) explained when discussing the effectiveness they have experienced while studying educational games, "The children are obviously having fun, but there's more to their game, which teaches science vocabulary while improving skills in observing, describing, giving clear and complete directions, and listening to and questioning those directions (p. 48).

Educational games work in any discipline. The games these teachers play are motivating, enticing, exciting, fun, and at the same time, most certainly academically stimulating. The students want to play, and they want to learn. Teachers are just starting to realize that it is possible for the students to do both. Moffett and Wagner

(1993) are strong proponents of the fact that academic gaming works well. They found the following:

. . . games are vestiges of folkways of learning that existed before public schools, which have, in their insecure professionalism, usually been scornful of them. As a result, parents tend to distrust games, and the society has drawn a sharp line between playing and learning. But it is precisely this sort of mistaken professionalism trying to make an exclusive place for itself that has resulted in the concept of reading as an activity requiring special practices and programs. Actually, being read to, dictation, and inventing spelling teach initial literacy because they are games, too, as attested by the fact that children will choose to do these things out of school for their own satisfaction. Play works (p. 36).

Games motive students to learn. Researchers show that students are more likely to be engrossed in the lesson plan if there is a game involved (Calliari, 1991). All members of the class become engaged in an activity where they are on a level playing field with their peers. Gruending, Fenty, and Hogan (1991) say, "Games can stimulate learners' involvement, reduce classroom boredom, provide as review of material, and create an enjoyable atmosphere which enhances learning and retention" (p. 32). Blenner (1991) accentuates this sentiment and stipulates, "Games add action to the

classroom situation and motivate learning. Games promote team work and collaboration and may stimulate real work problems" (p. 35).

Findings from this review of relevant research show that students will learn when they are engaged in activities where they are motivated.

## **CHAPTER THREE**

### **Methodology**

#### **Introduction**

In Chapter Three, the goal of the project is presented, followed by a description of the school site, area, and school population that served as an impetus for this project. A brief outline of the English curriculum at Inland High School is explored. Game development for the project is given. The methodology used to determine if educational games are beneficial will be described. The student surveys designed to obtain students' opinions about educational games used in their classrooms are also presented.

#### **Goal of the Project**

The goal of this project was to determine if educational games enhance learning in the secondary classroom. The research question for this study was: Do games help students learn in the following areas: participation, fun, leadership, learning, getting to know other students better, encouraging attendance, and allowing freedom for students to move about the classroom. This project is an example of action research generated when games used in the researcher's class seemed to increase student motivation, enthusiasm, and learning.

### **School Site, Area, and School Population**

Students in high school English classes at Inland High School (fictitious name) were used in this study. The students at Inland High School come from all economic levels. Some students come from extremely affluent homes, while others come from some of the least affluent homes in the area. Parents of some students are successful college graduates, while parents of other students can neither read nor write.

By using a broad and diverse range of student population, the writer hoped to gain a better rationale for the assumption that using educational games is a superior way to teach and reach all students.

Games were used specifically for students in grades nine through eleven. Students in two English 9 classes and three English 11 classes were used as research groups because they allowed the researcher to include the wide range of diversity in that particular student population. Students at Inland High School, particularly those found in the sample language art classes, are a good cross-section of the students in the school. English classes are mandatory at Inland High School. There are students with high skill levels and abilities, as well as resource students and special education adolescents. Many students in the classes are second language learners who speak only their native language at home. Yet there are some students

who speak three or four languages. Reading levels also vary greatly, from second grade to college level.

### **English Curriculum at Inland High School**

The curriculum for the English classes at Inland High School is very structured. The school district and the English Department both have in place strict guidelines and mandates for the teaching of English on all levels. There are specific core novels, plays, short stories, and essays which teachers are responsible for teaching in their courses. There are several other required units and sections which teachers are also responsible for teaching to their students during the course of the year, such as specific vocabulary words and numerous worksheets for grammar practice and literary analysis. The teaching of several types of writing and specific essay styles is also required.

In order to maintain a consistency in the department and to insure that all students are taught the minimal core requirements, the department is very strict about the content of what is taught. Teachers are usually asked to teach the units, and especially the core works, in a somewhat sequential form, so that students who change classes midterm are able to continue their study without redundancy.

This being said, it is also true that teachers are free to teach the required themes, units, and literary



works in an individual manner, in any way which they think will help them be more successful teaching their classes.

Strategies vary immensely between teachers in the department. Points of emphasis and the manner of disseminating important information and pertinent facts are also left completely up to the discretion of each individual teacher in the department. Teachers are on their own to use their time to the best of their ability and to get the best learning results they can from their students.

These types of classes, constructed of a rigorous curriculum, yet open to new and imaginative teaching strategies, seemed to be a good way to determine the effectiveness of educational games. Each student would receive the same curriculum in the same way from the same teacher, thus limiting variability in teaching strategies, while increasing reliability. The classes chosen to serve as the samples in which games were used were picked at random. There was little or no prior knowledge of student abilities or backgrounds except that which was incidental.

#### **Game Development and Use**

Games, such as: motivational games, cooperative games, team building games, word games, musical games, and movement games, selected for use in the sample classes were developed and used by the researcher for their perceived ability to: first, interest the student in classroom

activity; second, motivate the students to a higher level; third, foster a healthy competitive spirit in the classroom; fourth, instill a sense of team building and team learning among a class group; and fifth, promote initial learning and review concepts. Most of the games used for this project were not standard, commercialized games that one would buy at a retail outlet. They tended to be formulated, made-up, or conglomerated from past successful experiences. Several of the activities or games were simply a favorable way for the teacher to involve students. A major goal of the writer was to provide a means by which every student in the class could feel like a part of the learning community.

Two important elements stemming from the games were required as a common adhesive to the process. First and foremost, each game used in the classroom was deemed to be educational. That is, there had to be a direct correlation between the game or activity and student learning. Gordon (1970) agrees with this philosophy, and further says, "Games promise to enjoy increasing success in the classroom; they have the magnetic appeal of requiring active learning and being fun at the same time" (p. 16).

Some games allowed students who were not as outspoken or outgoing to filter to the top and be a team leader or contribute meaningfully to his or her team. Other games gave students with different styles of learning the

opportunity to excel in front of and among their peers and classmates. This philosophy is accentuated by Farren (1968), who puts forth the idea that:

Games work with underachievers while other methods fail because they pose a problem within defined boundaries that students can understand. Also, the students find that games, unlike teachers, parents, or friends are not capricious. They represent to the student, an orderly, constant system with which he can cope. (p. 4)

Several games initiated or required students to get up out of their seats, and mingle with other students they did not know very well. Bruner's (1966) theory of games is clear, and points to the conclusion that:

Games go a long way toward getting children involved in understanding language, social organization and the rest. They also introduce, as we have already noted, the idea of a theory of these phenomena... They provide a superb means of getting children to participate actively in the process of learning-as players rather than spectators. (p. 143)

The mixing of physical movement and interaction in the classroom regularly insured that the students would not get bored; both activities are quite natural and necessary with most adolescents (Carlson, 1969).

## **Research Methods**

This project studied a secondary classroom where many different types of games and alternative learning activities were used. Five class groups of secondary English students were used as samples for this project: two freshmen classes and three junior classes. The different age groups were used to show if any disparity existed in the opinions of students due to age difference. All of the classes were designated as heterogeneous groups. There were no honors classes or Advanced Placement classes in the sample grouping.

Students were surveyed in order to determine if they thought games had made a difference in their learning. Three class periods were given opportunities to use games for learning and reviewing, while two other classes were not given any games. The time of study for the majority of the project was one year, however, the project does include some samples of games that were used over a longer period.

Two surveys were given at the end of the school year. The surveys were used to allow students to give their own opinions about whether the use of educational games had helped them learn. The two surveys used to evaluate the effectiveness of games were: A Year-End Evaluation, and a Classroom Game Questionnaire. By surveying five heterogeneous secondary language arts classes, the writer hoped to determine if games motivate students to learn.

The researcher also tried to determine through surveys if different types of classroom games (motivational, cooperative, team building, word, and musical) increased student participation, fun, leadership, learning, interaction, attendance, or freedom to move around in the class. Research data also provided information about how a curriculum, which included educational games and activities, might be able to help students of all backgrounds and abilities learn.

Through responses to survey questions, students were asked to give their own opinions about educational games in their own classroom. Their personal responses provided evidence of whether academic games help them to learn better.

The time factor of one year allowed the researcher to observe various groups in the sample classes for a complete year and measure the impact that classroom games had on students. This determination was based on students' own observations. Three of the classes were given the opportunity to use various games included in the lesson plans, while games were not used in two other classes. One freshmen class used games, while one did not. Two junior classes used games while one did not. The researcher then examined the outcomes of those classes, as well as student responses to learning as recorded in surveys and verified through participant observations.

The research attempted to determine if games enhanced learning for the classes that used them. It also attempted to show that groups which had been allowed to use games would have the highest interest in the classes, a stronger desire to participate in class activities, and ultimately, a better learning experience. A given determination was that the intrinsic motivation that a student might gain while playing games, such as an increased desire to learn, or a willingness to be at school, is too difficult to measure, because of a wide array of varying and uncontrollable factors.

The writer was also interested in which games worked, which games did not work, and why. Students were asked to identify the kinds of games that motivated them and those games that specifically helped them to learn. As previously stated, a sampling of various educational games used during the research period will be presented in an anecdotal manner in Chapter Four. Some positive and negative aspects of specific games listed in the survey will be described.

Several different versions of educational games were used consistently, two to three times a week, in some classes, while no games at all were used in other classes. The games and activities were developed over a longer period of time, but students' responses to the games in particular, and to the class in general were compiled after

one full year of school. The goal of this action research project was to demonstrate through student statements, confirmed through participant observations, that educational games motivate students to learn.

### **Student Surveys**

Two forms were used to obtain students' reactions and perceptions of the effectiveness of games in the class. The two instruments used were: A Classroom Games Questionnaire and A Year End Evaluation. Copies of each of these forms can be found in the Appendixes. The results of these surveys in matrix form can be found in the Tables in Chapter Five.

Each one of the five sample classes responded to the Games Questionnaire survey and to the Year-End Evaluation, including those classes where no educational games were used. Thus, there are some responses to the Games Questionnaire such as, "What games?" Students were asked to be very candid and truthful about their perceptions concerning the use of educational games in the class. Each form was turned in anonymously. Information was compiled by class period to delineate those periods where games had been used. This was the only sorting that was done.

On the Year-End Evaluation form there were general questions about the class and what the students liked or did not like about it. The survey included general questions such as, "Did you like the class?" "What didn't

you like?" "Which book did you like best?" "Which book did you not like?" "Was the class fun?" "What would you like to see more of?" Also an open question, "Any other comments?" was used.

On this particular form there were only two specific questions dealing with the educational games used in the class. One was, "Did you enjoy the games?" And the other was, "Did you learn when we played games?" (For all the questions on this survey see Appendix #A.)

On the Classroom Game Questionnaire, each question was about educational games and how each type of game increased either positive or negative behavior towards learning in the classroom. Responses to this form were simple. The students could answer either yes, no, or leave the category blank. A yes response indicated that the student thought that a category of educational game or activity such as: Motivational Games, Cooperative Games, Team Building, Word Games, Musical Games, or Movement Games, promoted positive behavior in one or all of the following options: Participation, Fun, Leadership, Learning, Getting to Know Others, Encourage Attendance, or Freedom to Move in Class.

Both surveys were given to the students in a regular session at the beginning of the period. Another teacher distributed forms, gave instructions to the students about the forms, and collected them. The regular teacher left



the room while the students were filling out the survey form.

## **CHAPTER FOUR**

### **Educational Games in Secondary English Classes:**

#### **A Personal Narrative**

##### **Introduction**

The following are some of the games and activities used for this study. They are presented in an ethnographic and anecdotal style, with the writer expressing them in first person voice. They are categorized by type, the different sections being: motivational games, cooperative games, competitive games, team building, word learning games, musical games, and games with physical movement.

##### **Section One--Motivational Games**--(Bell and Wiechert, 1981)

"When educational games are developed, teachers and media specialists can exploit student energy for the business of learning. Games increase motivation, help the socialization process, clarify perplexing concepts, and integrate classed of diverse ability levels. If the gaming technique is used appropriately, the experience can be a rewarding one for both the student and the teacher or media specialist" (p.27).

##### **Same is Good--New is Better**

The opportunity to do the same thing day in and day out, gives an air of stability and reliability to the students who seek and enjoy that type of learning. However, when a unique and total change of pace is

presented to the class, the students usually wholeheartedly throw themselves into this curious mix of events. The response is most always accompanied by enthusiastic anticipation, which leads to a greater learning experience. Right away, students want to know "what's up!" "What is this or that for?" "Why is that poster, or box, or bear in the back of the classroom?"

### **Coke--It's the Real Thing**

When I first began teaching, I was appalled at the lack of interest of the majority of students while they were saying the Pledge of Allegiance. This year the apathy seemed to be at an all-time high. That is to say very few of the students in the class paid any attention to the principles, ideals, and symbolism behind the pledge. I asked them what would motivate them to become more involved and more enthusiastic about the pledge of allegiance to our country. They responded by saying, "give us something." When I suggested that I give away an ice-cold Coke every week to one of the students, they agreed that would help to give them the impetus to do better.

Using some sort of game, contest, or raffle, each Friday I give away a Coke to one of several students who now faithfully say the pledge of allegiance every day. I have gradually noticed a change of attitude toward the pledge. I believe that this simple ritualistic game every week provided the "excuse" for some students to feel OK

about being patriotic. Some still do it solely for the Coke, but others have learned that they don't have to feel bad about saying something positive about our country in front of others. It gave them a chance to realize that each one could be a unique individual.

Almost every student now respectfully says the pledge. They do not want to miss the opportunity to get that free Coke second period every Friday. The most interesting thing is the students seem to enjoy the idea of playing the game as much as winning the prize. Never a Friday goes by when they don't remind me about the Coke for the Pledge of Allegiance.

### **Everybody Loves a Riddle**

For every test we have, I like to insert riddles and paradoxes for the students to try. Not only does this allow for other logical-to-concrete ways for the students to think things out, but also it becomes an enjoyable part of the test taking experience. Again, I could confidently say that 99 percent of students look forward to figuring out some conundrum, puzzle, or riddle added to the end of standard tests. If for some reason, I forget to place the riddles on the test, I pay for my lack of preparation by having to listen to the whines and complaints of students who demand, without exception, that I somehow invent a gimmicky question or two on the spot, for their "just and deserved" satisfaction.

## **A Feast--Students Under Glass**

Whenever we do a special oral project in class, which is several times a year, I always make a game out of taking a picture of the students who participate and complete their projects. As soon as I can get the film developed, I bring the photographs in. I pass them around so that everyone sees them, making the photos especially accessible to the students who didn't do their project. All of the pictures are artistically placed under a piece of glass, which sits on my desk.

The game, and it is truly a game, of taking their photo and getting them to smile helps to relax the students before they stand up in front of the class and give their report. There are several students who do their report just for the privilege of getting their photo taken and having it displayed "nakedly" on my desk, for everyone to see.

Those pictures under the glass on my desk draw the attention of anyone who comes into my classroom. I will use the photos for other game-like activities also. Sometimes, I will flip a coin on my desk, and the photo of the person on which the coin lands, immediately becomes the class leader, group facilitator, or monitor.

Photos are also used to help various students learn to recognize and get to know other students in the class better. A few years ago, I was shocked when, at nearly the

end of the year I asked one of the students to pass out papers. She did not know some of the students among whom she had spent the entire year.

### **Will a Volunteer Please Step Forward?**

Many times students are hesitant to volunteer to go first for some assignment, oral report, or project. If it seems like this is going to be one of those times, I turn it into a game of chance. Who goes first? A quick set of rules defines the parameters. Then I pick a number from one to a hundred. The first person in each row picks a number for his/her whole row. The row closest to the number "gets" to go first, and then the row to the right or left of them goes next, and so on. It is interesting how little time it takes to do this, and how accepting the students are of it being completely fair. No complaints.

**Section Two--Cooperative Games**--(Orlick, 1977) "Why not create fun games, which help children become more cooperative, honest, and considerate of others? Why not play games that help us become the kind of humanistic and concerned people we know we have the potential to be? Why not design games with these kinds of positive interpersonal behavioral objectives in mind?" (p. 33).

### **The College Trip**

During tours of various colleges, a group of about forty juniors and four adults listened and took notes about

every imaginable part of college and campus life at that particular university. Later, the students were asked about the particulars of the university they had just visited. If they responded first, they would win a raffle ticket. There were numerous questions about all aspects of that campus, such as necessary required GPA and SAT score for entrance to the university or what the ethic breakdown of the college is.

Once all of the questions were asked, tickets were picked from a basket and the winners were awarded prizes such as, T-shirts, hats, souvenirs, binders, pencils, pens, or other items all showing the university logo or mascot. The students were very much interested in learning the information about each university because of the prizes offered. Every student carried a notebook and wrote down as much information as they could copy or remember. In the long run, the students all learned a lot about each university. It helped them in their decision later next year, as seniors, when they had to apply to various universities. They had a better understanding of what each particular university that we visited had to offer them.

They had seen the libraries, the dorms, the student center, the admission office, the sports complexes, and had learned many other things which helped them to be more informed and to make a better decision about their future, as it is related to college. The game was extremely

instrumental in helping to motivate the students to learn about the universities they visited.

### **And the Blind Shall Lead Them**

When our unit turns to Helen Keller and Annie Sullivan, the miracle worker, then I allow the students, through a game-like simulation, to experience the feelings of actually being blind. A group of students is chosen to leave the classroom and to spend nearly the entire period traveling around the campus. One of the students is blindfolded, one is the "guide," one is the scribe, and one is the storyteller. The guide leads the blind pupil around the campus, going up inclines, down stairs, around trees, through corridors, and navigating other interesting obstacles. No one is allowed to touch, and only the guide is allowed to talk to the "blind" person.

The students return to the class five or ten minutes before the end of the period. The scribe has recorded everything that was said by the guide to the blind student, along with an itinerary of the journey. He hands his notes to the storyteller, and the exploits are narrated to the entire class. We then discuss the difficulties of being disabled. This discussion is especially interesting because the class can always refer to the empirical evidence experienced by the reporting group, which is always deeply empathetic.



**Section Three--Competitive Games**--(Davey, Dickerson, and Sullivan, 1994) "It has been shown that competition and rivalry produce results in effort and speed of accomplishment. There is a natural group competitive element in many active game situations" (p. 194).

### **Football**

For a while, it was a fad for some students, particularly boys, to make triangle-shaped folded paper footballs for "kicking field goals." I used to confiscate them and throw them away. Now, instead of taking them away, they can make them for use in class to review a story we have read. As for the academic testing, all of the pertinent parts of the story are covered by the "football review." They must learn, recognize, analyze, theorize, identify, and explain elements pertaining to: characters, theme, plot, analysis of literature, mood, setting, point of view, tone, or any other element of literature that I wish to emphasize during that particular unit. If students in teams are able to correctly respond to points pertaining to the literary elements of the piece we are studying, then they get a chance to "kick a field goal." The winners of course, entitle themselves to rewards, treats, or other type of positive reinforcement. This may be as simple as letting one group get a free homework pass or some sort of extra credit.

## **At the Board**

Games are incorporated in my class to allow students access to the board for learning activities. At times, because of the restrictive nature of my classroom area, I am not able to allow the use of the main chalkboards by students. There are numerous gaming opportunities for students to use the normal school blackboard. When the use of my boards is restricted, I have been able to implement and use other boards, smaller and more portable. The use of an easel and chart paper is also a good way to let students get involved in their learning.

Students love to go to the board and share material that they have learned. When you turn that opportunity into a game, you strengthen the listening capability of the students, as well as insure that the learning will be improved because of the natural motivation caused by competition. In one of the simple games we play, I bring up six to twelve individuals, each ready to write on the board, and then ask questions. The first student to correctly respond wins, and either elicits the right to sit down or stay at the board, while the others go back to their seats, and a new set of competitors comes to the front to meet the next challenge. A teacher can formulate questions quickly to play this type of game. You could use it for spelling, vocabulary, and a myriad other questions related your subject.

### **Frisbee Magic**

Here is another kinesthetic game that is wonderfully successful because it gets every individual involved. Each of the students makes up several questions of varying level of difficulty. I have to get the questions before we play and approve of them. The students have small nurf-type Frisbees, and they tape a question to the bottom of the Frisbee and send it across the room toward a teammate. The teammate must not leave his seat, and he must catch the Frisbee cleanly, and then also answer the question correctly in order to score. The other team then gets a chance. Any cheating or illegal play causes a team loss of a turn. The team with the highest score at the end of a timed period wins.

**Section Four--Team Building**--(Gordon, 1970) "Games tap the human instinct to cooperate, even to conspire--in contrast to most conventional classroom activities, which demand individual performance and frequently penalize cooperation" (p. 25).

### **Find Waldo**

In one of the games we have played in my class, the students must locate a missing word, idea, concept, or answer to a question in a painting, photograph or other appropriate item. Students may work together to enhance a sense of comradeship or team. They may be presented with

only part of a clue needed to answer the prompt. Again in this game, there may be some minor movement by the students in order to secure the needed information from other students. The search is the key to increasing learning and understanding among the class members.

### **Pick Your Group**

There are more ways to pick groups than I can count. Every teacher has his/her favorite two to three ways to assign students to various groups for games or activities. I use a couple of different ways that I like to formulate or choose groups. Sometimes I will list students on the board by their favorite colors. Sometimes they are chosen by the month of the year in which they were born. Other times, as the students enter the class, I will invite them to sit wherever they desire on that particular day. Beforehand, I place different color "post-its" under each desk. The teams are formed by colors.

Regular playing cards can also be used quickly and easily to choose different teams. A teacher may use the former examples of team making, or many other ideas, and manipulate somewhat the outcome of the teams to a specially desired group. The students accept grouping like this as a fair way to break up the class into "random" groups, even though I can use what I want to formulate groups in a predetermined way. Teams chosen in manners similar to this

are readily disposed to work well together, and it's fun being picked.

### **Lights-Camera-Action**

I love to use video in my classroom, not the showing of movies, but the making of movies. The students are given the assignment to perform a scene from any novel, short story, or play that we have read this year. They must write the original script, gather props, make a backdrop or settings, memorize their lines and choreography, and perform the scene in front of the other students while someone videotapes the performance.

The students are given almost complete autonomy and cinemagraphic freedom to demonstrate their art, as well as their understanding of the plot, characters, or theme of the work they are performing. It is hoped that the students will implement important aspects of the piece. They are given some class time to organize, but the bulk of the assignment takes place outside of the school setting. This has achieved many interesting experiences for several students over the years. It has given students of different backgrounds and circumstances the opportunity to meet each other in their home setting.

The video experience is one of the richest of assignments for me. I enjoy watching the different groups evolve, and in most cases miraculously become successful entities.

### **Puzzle in an Envelope**

The idea behind putting puzzles inside envelopes and then handing them to students to solve is very adaptable to almost any theme. Each person has a key element that is needed to solve a puzzle. For example, the students must be able to organize a Shakespearean sonnet into the correct rhyme scheme, ABAB, CDCD, EFEF, GG. This sort of game forces the students to communicate with other members of the class in order to accomplish a set goal.

**Section Five--Word Games**--(Wilson, 1972) "Students need many "experiences" with the content and skills introduced in the school curriculum. They need many exposures to a word before it is recognized instantly and consistently to become a part of their sight vocabulary. Students need practice in applying word attack, vocabulary, or other skills to new and meaningful situations before they achieve independent mastery of these skills. Learning games can provide the needed repetition for skill mastery without the negative effect of drill-type activities" (p. 206).

### **Words and Sentences**

The use of color and visual effects stimulates the senses also. In order to help students visualize punctuation, parts of speech, sentence structure, and syntax, I put sentences together using large pieces of

poster board. The cards are large enough to see easily from any part of the room. The card pieces are color coordinated so that all parts of speech are in the same color. Students can build sentences by placing the correct words and punctuation in an acceptable order. The class can add, delete, or continue to build based upon the objective of the sentence. At times, the students can carry the cards to the right part of the sentence and stand with it in front of them. The movement is good for the students, and it provides some type of ownership toward a correctly punctuated and mechanically sound sentence. It is much easier for the students to recognize errors in syntax when they are forced to sit down after someone sees that their part of the sentence does not fit.

#### **A, E, I, O, U, and Sometimes rhyme**

Rhyming and using recognizable symbols and characters are always a good way to help students retain information. I am always amazed each year at the amount of review that has to be done with the most basic and standard information. Sadly, students seem to retain little over the summer and many of them lose everything they know during spring break. I use rhyming and acronyms to teach some concepts, and this really seems to help the students remember certain things.

I use the acronym of A,E,I,O, to help freshmen remember the writing styles we teach them during their

ninth grade year. The styles are: autobiographical, evaluation, interpretation, and observation. Without a doubt, this kind of chant turned into a game to help them remember it, is invaluable to their ability to retain the concepts.

ESLRS are in vogue in the high schools right now. The Expected School-wide Learning Results have become so important to the administration and to the accrediting association that it is hoped that every student will know and learn them. I have the students in my class make up some catchy jingle using the ESLRS acronym, and it only takes a short amount of time to master the concepts. For example, "every cool chick loves candy" is a jingle for the acronym ECCLC. By learning the jingle, students can better remember the five outcomes of the ESLRs:

E) Effective Communicator, C) Critical Thinker,  
C) Community Contributor, L) Lifelong Learner, and  
C) Creative Thinker

#### **Romeo, Romeo, Wherefore Art Thou Romeo?**

I have in my classroom something I think I will always cherish. It is a "concentration" puzzle solution. Some former students made it, and I have used it nearly every year, and will continue to utilize it for reviewing for the final exam. Students who answer questions in reviewing a comprehensive semester final exam earn the privilege of trying to match two cards on the puzzle board. If they can



match card sections, then that portion of the puzzle underneath the cards is revealed. In order to win the ultimate prize, a student must successfully identify the meaning of the coded puzzle underneath. The answer to my puzzle is, William Shakespeare wrote Romeo and Juliet. The solution is very difficult because it is written only in symbols. Until almost the entire puzzle is revealed, portions of the solution remain hidden. Every year, the students have to work really hard to get the correct solution, and every year they seem to really enjoy the game and at the same time they learn what they need to remember to pass the final exam.

### **Dictionary Chase**

Because of various budget restraints and other basic lack of funds, textbooks, novels, plays, and dictionaries have been scarce and hard to find. It is so important for the students to be extremely familiar with dictionaries and glossaries, and to be able to use them in the numerous ways available. Mandatory state tests, district exit exams, and proficiency tests all require the skill of using dictionaries, glossaries, appendixes, tables, and graphs. I use several games, which help to reinforce knowledge in these skills. One of several games is the "word hunt." Each student has a dictionary or other reference book, and the first one to be able to answer a question about some form of a word or about the graph or table wins. Not only

does the game help the students less skillful in finding certain reference materials in our books, but also it helps them to increase their speed in locating that information, a big plus for any student.

### **The Poetry Man**

I love poetry. I want every one of my students to feel the same way I do about the magnificent pieces of poetry we read in our class. I want them to sense the passion, experience the heartache, and understand the agony of the poet. To accomplish this in a classroom setting is difficult. Yes, there are usually one or two students who enjoy poetry, and really work to analyze, interpret, and understand. But my goal is to capture everyone. I also want my students to experience the joy of writing poetry.

One of the ways I use to help students write poetry is to brainstorm on the board. We might start with a haiku poem, where every word is important and filled with passion. The students come up with an interesting and intriguing title and theme for the poem, and then we work together to build it. Eventually the most illogical and "off-the-wall" suggestions are listed and sometimes used. This is also very much a game. All students are involved. All students are engaged. And most students are happy with the end product because it is part of them. It is all made possible by this high energy, high output, low profile game.

## **In Pursuit of Trivia**

Recently, during a field trip to the mountains, we, the chaperones, indoctrinated the students into playing Trivial Pursuit. They played these along with another game, "Literary Pursuit," something a group of teachers have put together over a period of time. The students who played together grew closer together as a class family. They could become more united by the atmosphere that is enthusiastically exaggerated when games are played.

The kids went through a myriad of feelings while playing games during those two nights. They laughed until they cried; they joked; they not only talked, but they actually communicated about many peripheral issues, important to us all. They seriously discussed issues such as: laws, propositions, values, and ideologies. There was a great appreciation shared by each member of both teams that night. Other students, who deemed it "uncool" to play games really missed out.

They were the ones who ended up getting into trouble for infractions such as breaking curfew, being loud and obnoxious, and for generally being pests. The group who played "Trivial Pursuit" was enjoying themselves so much that they did not even have time to think about getting into trouble. The game was the difference. To rephrase the erroneous Hamlet, not "the play is the thing," but, "play is the thing."

**Section Six--Musical-Song-Rhyming Games**--(Humphrey and Sullivan, 1970) "Some learning games provide the entire class with additional experiences which relate to curriculum, content, and skills. In fact, such games should be highly desirable if they can be fun and meaningful to the students in the group" (p. 7).

### **Music-Chants-Songs**

Young people today feel strongly and identify with "their" music. This statement transcends all time and all cultures. We felt the same passionate way about the messages of our music, rhythms, and lyrics. Any time a teacher can bring music, poetry, or art to the attention of the students through the teaching/learning experience, he is sure of at least two things. One, the students are listening, usually on the edge of their seats. And two, there will always be a topic for discussion. Many games are an impetus for team building and strengthening communication skills, as well as a dynamic way to teach tolerance, compassion, and understanding between students of many different ideas, opinions, and backgrounds.

Through the use of games, many times students who are the most timid and the least likely to participate in some standard categorical method of learning, reviewing, or testing--become some of the more vocal and animated participants. Sometimes the shyest students become the

leaders of different game groups or teams, something that simply would not happen in the more "accepted" methods of formal pedagogy or variations of the academic teaching and learning experience.

### **Name That Tune**

Remember Romper Room? Everyone wanted to be a part of that classroom marching band and play all of those different instruments. There are numerous instruments that can be brought to the class and used for academic learning games. I have a keyboard in my room, and there is always someone to play it. Sometimes we play "Name that Tune." The first students who can recognize a tune gets a shot at answering questions about the unit. The entire class is listening. Everyone is "captured" and attentive.

### **Musical Chairs--or Sponges--or Erasers**

The class is divided up into several teams. When the music begins, usually a CD borrowed from a student, the participants start to pass sponges around to each other. They are not allowed to throw or toss them. The penalty for this infraction would be loss of points, and that student is disqualified from further participation.

When the music stops, the players who are holding the sponges, must answer correctly in order to remain in the game or to receive points for their team. I am able to be all over the room and still control the operation of the CD player with my remote control.

**Section Seven--Movement Games**--(Ernest, 1986) "Playing games demands involvement. Children cannot play games passively, they must be actively involved, the more so if they want to win. Thus games encourage the active involvement of children, making them more receptive to learning, and of course increasing their motivation" (p. 3).

### **Baseball**

In "Baseball," students dialogue, answer, respond, or debate. It is played with teams, bases, outs, innings, and runs, all very flexible making it applicable to any classroom setting. In this game, there is actual movement by students in the room, as they move from base to base and finally "home" to score. I have always been a strong advocate of allowing students a way to move about without disturbing the rest of the class. A class setting where students are restricted to their designated cubicles or desks seems a little like prison. When I walk into another teacher's class and see all the rows lined up neatly and each pupil sitting like paraplegics in their restricted areas, I know that there is a struggle for power in that room. It is not always bad to teach like this, but it is never always good either. Movement around the class during academic games makes the class as a whole unit stronger. The students cheer for each other to succeed, in knowing

and answering the questions and in moving around the bases. Movement is good.

### **Be the Teacher**

In this activity, the students have a chance to go up to the front, sit in that coveted and comfortable teacher's chair, behind the teacher's desk, and try to stump the rest of the class. Students have spent quality time coming up with their own questions about our unit of study. The questions are intricate, thought provoking, complex, and interesting. They help provide the students with an informative and unusual yet pertinent view of the subject.

### **Riddles-Jeopardy-Buzzers-Review**

Synonyms, homonyms, antonyms, literary terms, vocabulary, spelling, poetry terms, and numerous other subjects can be studied and the skills reinforced by using several types of review games. I have a set of electronic buzzers where teams can compete against each other. The movement helps to hold the attention, and again, everyone wants to be involved in the game and subsequently, they are learning the objectives of the lesson.

### **Summary**

The preceding examples of games are presented in a light-hearted and informal way. As a teacher it is important also to not take things so seriously. When dealing with games this is especially important. One can imagine a teacher looking at a lesson plan and trying to

plan for all of the nuances and extemporaneous "problems" and "pleasures" that come to a class that uses educational games to enhance class activity and learning. The nature of games is "fun." Things are probably not going to happen in a prescribed, planned way. Teachers need to be flexible. Pliancy can be the teacher's best friend when it comes to teaching by using games.

The games, too, are in a constant flux. They are dynamic and evolving. The same educational game one teacher has so much success with may become the biggest "bomb" for another teacher. There are many elements that go into making an educational game work. Only one of these elements is the game itself. The classroom community is important, as is the enthusiasm of the teaching presenting the game and how he/she teaches the rules to that game

Enthusiasm when playing an educational game is a key element because many times the same game you played last time doesn't work the same. A game may not be received as well by the students this time as it was the last time. Enthusiasm is contagious and can rescue a good experience out of what may have been a bad one. Students remember games that bring laughter and fun to the classroom. They remember the feeling they get when they give the right answer and the class applauds or gives them some other type of recognition.



Educational games are loosely defined. There is no right or wrong definition. There is no right or wrong game. Games may be more formal and structured, or they may be informal and less structured. However, even in the informal games, rules must be made, understood, and followed. If one of the students breaks a rule, cheats, or manipulates the other players, there have to be consequences. Probably the best thing about using educational games is that everyone can play and learn. Games can be adapted to fit any student or any class. This fact alone makes the use of educational games indispensable to any teacher.

## **CHAPTER FIVE**

### **FINDINGS**

#### **Introduction**

Chapter Five is a presentation of the findings of this project. It will include information taken from two student surveys described in Chapter Three: Year-End Evaluation and Classroom Games Questionnaire. Also included in this chapter are Tables A, B, and C showing students' opinions about educational games in statistical form.

#### **Year-End Evaluation**

The Year-End Evaluation forms produced the following results. In response to "Was the Class Fun?"; 94% of the students in the classes with games responded affirmatively, while 88% of the students in the classes without games answered yes. In response to "Did you Enjoy the Games?" the group with games responded 63% to the affirmative, while the group without games responded 60% affirmatively. In response to "Did You Learn by Playing Games?" 54% of the group with games responded in the affirmative, while 40% the group without games responded yes. When responding to "What would you like to see more of?" 22% of both groups responded affirmatively. This means that 22% of the students mentioned the word "game" in their responses when asked what they would like to see more of.

Based on the perceptions of the students and their responses to the questions on the Year-End Evaluation, the

results are favorable towards using educational games. While there is a larger number of positive responses from classes that used games versus those that did not, it is not clear that the implementation of games was the only cause of this difference. The student enrollment in each class could have made some of this difference. The time of the day each class was held could be a factor in how each class perceived the usefulness of games to their learning process. The first period class (a class that used games) was early in the morning and the students were refreshed and renewed. The fourth period class (a class that did not use games) was right before lunch. Sometimes the students were more disposed to picking up their backpacks and getting ready early, in order to try to beat the long lunch lines, than paying attention close to the end of the class period. Also, the fourth period class was completely full and crowded in the room, whereas first period was not. This, too, may have played a part in how the students felt about educational games. Another possible factor in the discrepancy of scores may simply have been the willingness of one class to put a more positive slant on the survey in order to please the teacher. The period one class seemed more disposed to do this than did period four. A more favorable rapport between the teacher and the students existed in period one.

A copy of the statistics taken from the Year-End Evaluation immediately follows this section in Table 1. A copy of the Year-End Evaluation form can be found in Appendix A.

**TABLE 1**

**Year-End Evaluation Results**

Chart shows percentage of positive responses to  
Evaluation

	Classes Without Games n = 50	Classes With Games n = 65
Was the Class Fun?	88%	94%
Did You Enjoy the Games?	60%	63%
Did You Learn by Playing Games?	40%	54%
What Would You Like to See More of? (responses mentioned games)	22%	22%

## **Classroom Games Questionnaire**

The opinions of the students who responded to the Classroom Games Questionnaire indicated that, in general, educational games provided them with a positive experience. In all, there were 56 areas of calculation where the responses were designated as percentages. Fifty-one areas out of 56 showed a higher percentage of positive responses in the classes that used games. Five areas out of 56 showed a lower percentage of positive responses by classes that used games. The differences in the responses of the classes that used games and the ones that did not use games indicates that the students in the classes that used games felt that they learned better through their exposure to games in the curriculum. The overall average of responses to the questions from all the classes was approximately two positive responses for every one negative answer.

Based on this questionnaire, there is a perceivable difference between the classes that used games and the classed that did not use games.

Through the use of the aforementioned questionnaire, it was evident that many of the students in all of the classes wanted more games incorporated into the regular curriculum. Most of the positive responses indicated that students felt that they would be more motivated and involved in the class activities if they included games and

if the class was fun. Many of the students responded that they were able to learn through games.

A copy of the Classroom Game Questionnaire can be found in Appendix #B. A statistical result of this questionnaire can be found in Tables 2 and 3, immediately following this section.

TABLE 2

## CLASSROOM GAME QUESTIONNAIRE

**Classes With Games [one freshmen classes and two junior classes]**

n = 65

Chart shows percentage of positive responses to survey questions (figures in bold type show higher affirmative responses in classes w/o games)

CATEGORIES OF GAMES	Motiva- tional Games	Cooper- ative Games	Team Building Games	Word Games	Musical Games	Movement Games
Participa- tion	98%	94%	95%	81%	60%	67%
Fun	86%	89%	89%	<b>69%</b>	69%	66%
Leadership	56%	65%	<b>53%</b>	48%	62%	59%
Learning	76%	82%	85%	82%	55%	45%
Getting to Know Others	73%	77%	84%	65%	61%	<b>61%</b>
Encourage Attendance	55%	63%	58%	47%	60%	<b>58%</b>
Freedom to Move Around in Class	64%	83%	82%	<b>66%</b>	59%	69%



TABLE 3

## CLASSROOM GAME QUESTIONNAIRE

Classes Without Games [one freshmen class and one junior class]

n = 50

Chart shows percentage of positive responses to survey questions (figures in bold type show higher affirmative responses in classes w/o games)

CATEGORIES OF GAMES	Motiva- tional Games	Cooper- ative Games	Team Building Games	Word Games	Music -al Games	Move- ment Games
Participation	81%	79%	82%	76%	43%	62%
Fun	76%	73%	74%	<b>71%</b>	50%	50%
Leadership	43%	61%	<b>62%</b>	48%	25%	44%
Learning	64%	73%	78%	73%	33%	47%
Getting to Know Others	47%	54%	67%	64%	31%	<b>62%</b>
Encourage Attendance	46%	50%	40%	42%	38%	<b>62%</b>
Freedom to Move Around in Class	37%	70%	71%	<b>69%</b>	44%	63%

## **CHAPTER SIX**

### **Conclusions, Limitations, and Recommendations**

#### **Introduction**

Included in Chapter Five is a presentation of the conclusions drawn from this study. Limitations are given. The recommendations extracted from this project are presented. The chapter concludes with a summary.

#### **Conclusions**

The purpose of this study was to evaluate the impact of educational games and activities on secondary English classes. There are major conclusions that can be drawn from the results of this project.

1. Educational games had a positive impact on numerous classroom activities in one freshman and two junior classes. These learning activities varied greatly, and the study examined the results over a wide variety of conditions, including different grade levels and classes.

2. Based on the review of the literature and direct student responses, through a year-end evaluation and a questionnaire, there is evidence indicating a need for the use of educational games in the classroom. Educational games, both as a research subject and a practical classroom technique warrants further analysis and increased study.

## **Limitations**

Some of the limitations of the project follow. Trying to measure the positive affects of educational games in the classroom is a difficult thing to do. There are so many varying factors that can affect a study of this type: absenteeism, student diversity, and the difficulty of defining games, to only name a few. If one were to try and evaluate the effects of educational games based on the level of absenteeism in a class, for example, the perceived results may or may not be directly related to the methodology of using "fun and games" to instruct the students. Many of the students at Inland High School have family roots in Mexico, and it is a family tradition, and almost a requirement to go with their families back to their hometowns in Mexico two to three times a year. Sometimes these visits last a month or longer. Therefore, the results from the outcomes of these particular students in the class slant the figures for attendance. These students miss a great amount of classroom instruction. If games were incorporated into the learning activities while they were gone, the results would be skewed.

Not all students are from Mexico, but there are enough students who have different family/personal backgrounds that it is virtually impossible to formulate any reliable test or instrument that could measure all the students in a class.

There are many types of games that can be used in a classroom. Nevertheless, there are limitations on the specific gaming activities that make each one an educational game. In this study, the educational games were loosely defined. The selection of the games was somewhat random and picked at times because of the environment of the class or because it seemed appropriate for the class to be given a different method to learn the lesson's material. It is possible, for example, that the students already knew the material before a review of the unit was held. A positive conclusion about the effects of the gaming opportunity may have been premature or even erroneous because of the information already retained by the students. In other words, the educational game used may not have added to the knowledge base of the student.

Several aspects of using educational games must be studied and utilized in order to achieve the best results from the use of games in the classroom. First, one must define precisely what an educational game is. Second, the lesson objective must be clearly recognized and well planned. It is desirable for the teacher to identify how that objective will be measured. Third, game implementation must also be well planned and systematic. Fourth, it is extremely important that the organization of the game is done in a simple, congruent, yet effective manner. (Some educational gaming design techniques can be

found in the Resources for Teachers section.) Fourth, the evaluation of educational games must be usable and systematic. Once the preliminaries are done, the teacher must make other decisions about the games that could be used. Decisions of what games actually work and why, as well as a rationale for which games do not work and the reasons behind that assumption, must be made.

In this study, games were used and they were successful the first few times that they were used, but when the use of certain games became "overused," the students did not want to participate as much in them the next time. So, a conclusion was assumed that many games are useful as far as participation and enthusiasm for the student is concerned just as long as they keep the students engaged in learning. After a certain length of time, some games tend to become stagnant and lacking in appeal. In order to alleviate the effects of this reality, games must be in a constant state of flux, changing as often and as much as is needed in order for the teacher to keep the attention and the enthusiasm of the students.

### **Recommendations**

There are several generalized recommendations that come from this study. As stated previously, the present project was treated as a pilot study to future studies. There is still a need to analyze previous studies, as well as to conduct new and unique investigations in order to

contribute to the knowledge base of the positive effects of using educational games in the regular classroom on a consistent basis.

In light of the information gathered from this study and conclusions presented previously in this chapter, the following recommendations will be made which may benefit forthcoming studies.

First, future studies would benefit from a more rigorous experimental design. Attention should be paid during days when educational games are used so that results and outcomes are measurable and are more readily recognizable. More notes and records should be kept during participant observations. Also, any irregularities should be documented.

Second, the study could provide for personal interviews with a random sampling of students who participated in the classes with educational games.

Third, a more in depth study may want to sample many classes over several years to assure a better sampling. This would also tend to give a stronger reliability to the results of the study. A longer study would allow the researcher to derive a more definitive answer concerning the effects of educational games in the regular secondary classroom.

There is a need in education for supplemental methods of instruction to be used in conjunction with traditional

methods. This need is apparent as a number of studies and reports calling for educational reform have been issued in the last few years. The use of educational games has recently received more increased attention as a partial solution to the present state of educational problems. Educational games and activities used widely, on a regular basis, could help teachers teach better and could help students learn better.

## **APPENDIX A**

### **Year End Evaluation**

(Please answer these questions honestly)

- 1) What did you like best about the class?
- 2) What didn't you like?
- 3) Of the books and stories we have read, what was your most favorite?
- 4) What did you like the least of what we read?
- 5) Do you think you learned anything in this class?  
What?
- 6) Was the class fun?
- 7) Did you enjoy the games?
- 8) Did you learn when we played games?
- 9) What else could be done to make the class better or to improve the class?
- 10) What would you like to see more of? Why?
- 11) Any other comments?



## APPENDIX B

### Classroom Game Questionnaire

Read the survey. Place a "Y" for yes in the columns of the activities that promoted positive behavior. Place an "N" for no in the columns of the activities that did not foster positive enforcement.

	Participa- tion	Fun	Leadership	Learning	Getting to know others	Encourages Attendance	Freedom to move in class
<u>1. Motivational Games:</u> Coke for pledge of Allegiance, Extra credit riddles on tests. Picture when present projects							
<u>2. Cooperative Games:</u> Raffle for prizes. Role play - Helen Keller							
<u>3. Team Building Games:</u> Board Races, Make up teams. Birthday Cards. Video Projects							
<u>4. Word Games:</u> Acronyms A, E, I..., Puzzle "Concentration" Poetry Class brainstorming							
<u>5. Musical Games:</u> Musical desks							
<u>6. Movement Games:</u> Baseball, Jeopardy							

## APPENDIX C

### RESOURCES FOR TEACHERS

- Abt Associates Inc. Game List. Cambridge: Abt Associates, Inc.
- Bentley, W.G. (1996). Indoor and Outdoor Games. Belmont, Ca: Fearon Publishers. (elementary)
- Boocock, S.S. (1968). Simulation Games Today: Educational Technology. 8, 7-10.
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- Criscuolo, N.P. (1974). 100 Individualized Activities For Reading. Belmont, Ca: Fearon Publishers. (elementary)
- Daniels, S. (1971). How 2 Gerbils, 20 Goldfish, 200 Games, 2000 Books and I Taught Them How To Read. Philadelphia, Penn.: The Westminster Press. (secondary)
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- Landin, L. (1956). 100 Blackboard Games. Belmont, Ca: Fearon Publishers. (elementary)
- Lorton, M. B. (1972). Workjobs. Menlo Park, Ca: Addison Wesley Publishing Company. (elementary)
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- Metzner, S. (1973). Games for Reading Groups. Belmont, Ca: Fearon Publishers. (elementary)
- Mulac, M. E. Perceptual Games and Activities. New York: Harper and Row, Publishers. (elementary and secondary)
- Musselman, V. W. (1967). Learning About Nature Through Games. Harrisburg, Pennsylvania: Stackpole Books. (elementary)
- Sharp, R. M., Sharp, V. F., and Solza, A. C. (1974). 30 Math Games for Elementary Grades. Belmont, Ca: Fearon Publishers. (elementary)

- Spache, E. B. (1976). Reading Activities for Child Involvement. Boston: Allyn and Bacon, Inc. (elementary)
- Spice Series, Stevensville, Michigan; Educational Service, Inc. (elementary)
- Sullivan, D. D. and Humphery, J. H. (1973). Teaching Reading Through Motor Learning. Springfield, Illinois: Charles C. Thomas. (elementary)
- Thomason, M. E. (1972). Modern Math Games, Activities, and Puzzles. Belemont, Ca: Fearon. (elementary)
- Thompson, R. A. (1973). Energizers for Reading Instruction. West Nyack, New York: Parker. (elementary)
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- Wagner, G., and Hoister, M. (1974). Reading Games, (2<sup>nd</sup> edition). Darien, Connecticut: Teachers Publishing Corp.
- Waynant, L. F. and Wilson, R. M. (1974). Learning Centers... A Guide for Effective Use. Paoli, Pennsylvania: The Instructo Corp. (elementary and secondary)
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- Zieler, R. (1968). Games for School Use. Yorktown, Penn.

## GAME DEVELOPMENT CENTERS

Games Central

Abt Associates Inc.

55 Wheeler Street

Cambridge, Massachusetts

Department of Social Relations

John Hopkins University

Baltimore, Maryland

Academic Games Project

Nova Schools

Fort Lauderdale, Florida

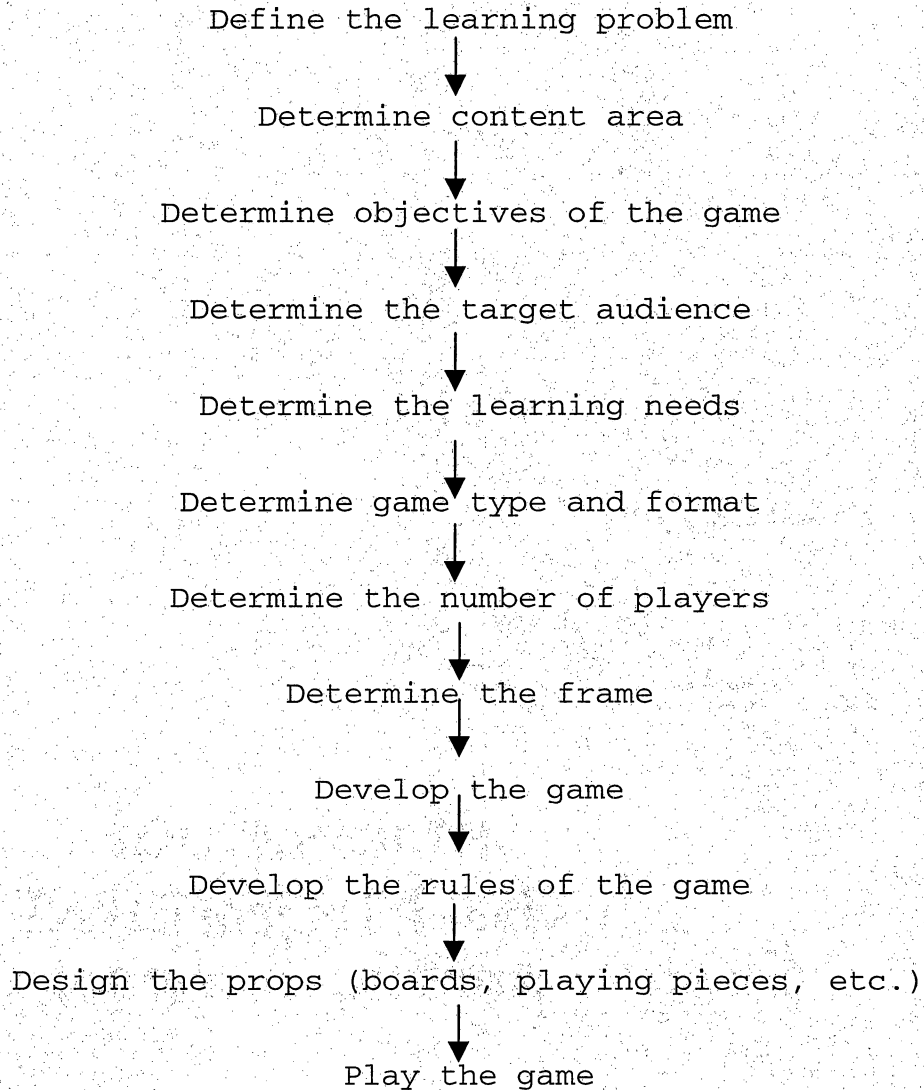
Western Behavioral Science Institute

1211 Torrey Pine Road

La Jolla, California

## Graphic 1

### Possible Steps for Creating a Game



**Develop evaluation form and revise as needed**

Note. From Abt Assoc. 1975.

## Graphic 2

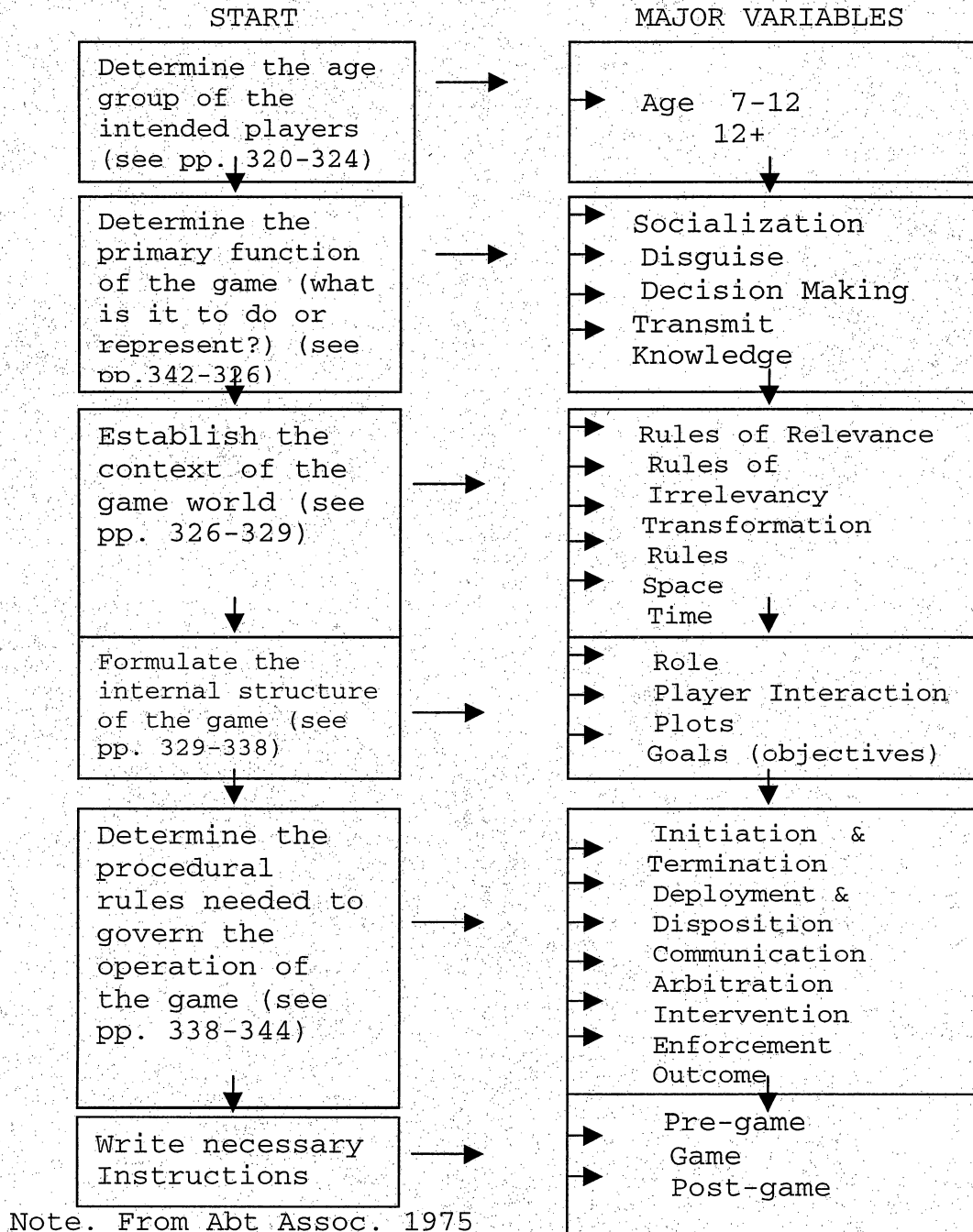
### A Model for Academic Games

Note. From Abt Assoc. 1975.

Ages 4-7	Ages 7-12	After 12	
1. Stages of development according	Last half of the egocentric stage	Cooperative stage	Codification stage
2. Practice of observance of rules	The child shifts from individual acts to reciprocal actions	Reciprocity	Actions are reciprocal w/ Differentiated responses to initiative of other players
3. Understanding of obligation of rules	Rules apply to all players and are obeyed as given and are hence unalterable	The individual is concerned with the mutual control and unification, regularization of rules	Rules are established by mutual consent of all participating players. They may be altered at any time
4. Typical social behaviors exhibited by child	Children carry out actions together but often miss one another's intentions. No winner is required	Activities are coordinate, i.e. actions are relative to other players. Each child seeks to win. Compet. is limited	Activities are interdependent and fully coordinate. Full range of social behavior is possible
5. Type of activity engaged in	Quasi-games. Example game: <i>Cowboys and Indians Doctor</i>	Central person games. Example game: <i>Red Rover</i>	Team games. Example games: <i>Football, Crisis</i>

Graphic 3

STEPS OF GAME DESIGNS



Graphic 4



# SUITABILITY CHECKLIST FOR EVALUATING EDUCATION GAMES

	Yes-----No
1. Most students can be successful. . . . .	5 4 3 2 1
2. The experience builds enthusiasm . . . . .	5 4 3 2 1
3. The players can easily understand the rules. . . . .	5 4 3 2 1
4. There is ample learning involvement . . . . .	5 4 3 2 1
5. Teacher supervision is limited . . . . .	5 4 3 2 1
6. A record keeping or progress indicator is kept . . . . .	5 4 3 2 1
7. The activity requires an appropriate length of time . . . . .	5 4 3 2 1
8. The experience is directly related to skills necessary for other academic tasks . . . . .	5 4 3 2 1
9. Decision making (not chance) is involved . . . . .	5 4 3 2 1
10. The activity is, in format and skill practiced, appropriate for my student . . . . .	5 4 3 2 1
11. The activity is adaptable to other skill or content areas . . . . .	5 4 3 2 1
12. The experience can be used more than one time without becoming boring . . . . .	5 4 3 2 1
13. The level of noise generated during the experience is acceptable . . . . .	5 4 3 2 1
14. The physical format of the game is easy to maintain and store . . . . .	5 4 3 2 1

\*A score of fifty-five points or  
higher is  
acceptable.\*

Note. From Abt Assoc. 1975

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